

REMARKS

This Application has been reviewed in light of the Office Action mailed May 5, 2004. Applicant appreciates the Examiner's consideration of the Application. The drawings have been amended to add new FIGURES 4-6 as requested by the Examiner. The Specification has been amended to include a brief description of the added figures and to provide a detailed description of each added figure. Additionally, Claims 21-25 have been added, claims 2-5, 9, 12-16, and 18-20 have been cancelled, and claims 1, 8, 10, 11, and 17 have been amended to clarify, more particularly point out, and more distinctly claim inventive concepts previously present in these claims. Applicant respectfully submits that no new matter has been added by the amendments to the drawings, specification, and claims. In order to advance prosecution of this Application, Applicant has responded to each notation by the Examiner. Applicant respectfully requests reconsideration and favorable action in this case.

Drawings

The Examiner objects to the drawings because "it appears that & is missing from C& operator* () const {return *operator->();}; as the function returns reference to an object of the class SafePtr" in FIGURE 2. (Office Action, page 2, paragraph 3). Applicants have not amended FIGURE 2 as suggested by the Examiner because returning a reference, as stated by the Examiner, is not the operation performed at Line 214 of FIGURE 2. Instead line 214 of FIGURE 2 returns an R value, as opposed to an L value, which would require the "&" as suggested by the Examiner. The "&" is not missing from Line 214 of FIGURE 2 and therefore Applicant has not amended FIGURE 2.

The Examiner objects to the drawings under 37 CFR 1.83(a) because the drawings must show every feature of the invention specified in the claims. (Office Action, page 2, paragraph 4). Applicant has amended the drawings to add new FIGURES 4-6 to show the subject matter recited in the original claims 3, 6-8, 10 and 13. Support for these drawings, in addition to being supported by the claims, may be found in pages 4, and 6-8 of the Specification. Applicant submits for the Examiner's consideration a new set of drawings showing the additional FIGURES 4-6 at page 3 of the attached set. Since there are no

corrections in FIGURES 1-3 the marked-up version is identical to the replacement sheets. Applicants respectfully request withdrawal of the objection to the drawings.

Section 101 Rejection

The Examiner rejects claims 11-16 under 35 U.S.C. § 101 as being directed to non-statutory matter. Applicant has amended claim 11 to recite that the safe pointer class is “embodied in a computer readable medium” as suggested by the Examiner. Accordingly, claim 11, as amended, is directed to statutory subject matter and is therefore allowable. Claims 12-16 are also allowable because they depend on claim 11. Applicant respectfully requests that the Examiner withdraw this rejection and allow these claims.

Section 112 Rejection

The Examiner rejects claims 1-10, 16, and 17-20 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended claims 1 and 17 to correct the informalities pointed out by the Examiner. With regards to the rejection of claims 9 and 16, the issue is moot as these claims have been cancelled. Claims 1 and 17 particularly point out and distinctly claim the subject matter the Applicant regards as the invention, and thus are allowable under 35 U.S.C. § 112. Claims 2-8, 10 and 18-20 are thus also allowable because they are dependent on claim 1 and 17.

Section 102 Rejection

The Examiner rejects claims 1-5, 7 and 10-20 under 35 U.S.C. § 102(b) as being unpatentable over Pike et al., *Checkmate: Cornering C++ Dynamic Memory Errors With Checked Pointers*, (March 2000), hereinafter “*Pike*”. Applicant respectfully submits that *Pike* fails to disclose, teach, or suggest the combination of limitations specifically recited in Applicant's claims.

For example, *Pike* fails to disclose, teach, or suggest “performing error processing by: generating a warning message without terminating program execution; and invoking a user defined error processing routine” as recited by Applicant’s independent claims 1, 11, and 16,

as amended. The Examiner points to *Pike* at page 354 left column, where it is stated, “terminate execution immediately and output a meaningful error message.” Nothing in *Pike*, however, discloses, teaches, or suggests “generating a warning message without terminating program execution. Likewise, *Pike* is silent as to “invoking a user defined error processing routine”, as recited in Applicant’s claims 1, 11, and 17 as amended. Therefore, *Pike* fails to disclose, teach, or suggest the combination of limitations specifically recited in Applicant’s independent claims 1, 11, and 17 as amended. Consequently, Applicant respectfully requests that the Examiner withdraw this rejection.

Section 103 Rejection

The Examiner rejected claims 6-9 under 35 U.S.C. § 103(a) as being unpatentable over *Pike*. Applicant respectfully traverses this rejection for the at least the reasons already provided and for the reasons discussed below.

The Examiner rejects claim 6 by taking Official Notice that, “calling a function with returning statement, within another function is well known in the art of software development, at the time applicant’s invention was made.” (Office Action, page 9, paragraph 1). Applicant traverses such assertion and specifically objects to the Official Notice taken. The Examiner is hereby requested to produce a reference in support of his position pursuant to M.P.E.P. § 2144.03. If the Examiner is relying on personal knowledge to supply the facts upon which this rejection is based, Applicant respectfully requests that the Examiner produce an affidavit supporting such facts pursuant to M.P.E.P. § 2144.03. Applicant respectfully request that this rejection be withdrawn, or to the extent the rejection is continued by the Examiner, that the Examiner provide support for such a rejection by reference to the art.

The Examiner rejects claim 8, and seemingly claim 7, by incorporating the rejection basis for claim 6. Applicant respectfully traverses this rejection and reasserts that, to the extent the Examiner is relying on personal knowledge to support the facts upon which this rejection is based, that the Examiner provide support for such facts by producing an affidavit in support thereof. M.P.E.P § 2144.03. With regards to claim 9, the issue is moot because this claim has been cancelled. Applicant therefore respectfully requests that the Examiner withdraw the rejections to claims 6, 7, and 8.

Applicant respectfully requests reconsideration and allowance of independent claims 1, 11, and 17 as amended, and all claims that depend on these claims.

New Claims

New Claims 21-30 have been added and are fully supported by the original specification. Application, page 4, lines 1-7; page 6, lines 8-28; page 7; page 8, lines 1-21; and pages 10-11. No new matter has been added.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

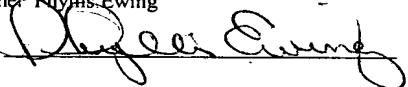
Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 08-2025, under Order No. 10004626-1 from which the undersigned is authorized to draw.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as Express Mail, Airbill No. EV 482737847 US in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit: August 3, 2004

Typed Name: Rhylis Ewing

Signature:



Respectfully submitted,

By


Michael A. Papalas

Attorney/Agent for Applicants(s)

Reg. No.: 40,381

Date: August 3, 2004

Telephone No. (214) 855-8186